

CLAIMS

What is claimed is:

1. 1. A method for canceling a task in a computer system, the computer system comprising a task scheduler for managing a plurality of tasks using at least one task queue, wherein the task scheduler is arranged to free resources assigned to a cancelled task of the plurality of tasks when the cancelled task reaches the top of any of the at least one task queue, the method comprising steps of:
 - 6 - identifying a task from the plurality of tasks as a cancelled task;
 - 7 - actively prioritizing the identified task to the top of its corresponding task
 - 8 queue; and
 - 9 - allowing the task scheduler to free resources assigned to the identified task.
- 1 2. The method of claim 1, wherein the step of identifying comprises a step of calling a Cancel function associated with the identified task.
- 1 3. The method of claim 1, wherein the steps of identifying and prioritizing are performed by calling a CancelAndRemove function associated with the identified task.
- 1 4. The method of claim 1, wherein the step of prioritizing further comprises a step of setting a NextExecution parameter of the identified task to a value near zero.
- 1 5. The method of claim 4, wherein the step of prioritizing further comprises a step of updating an Index parameter associated with the identified task in accordance with the top 3 of its corresponding task queue.
- 1 6. The method of claim 1, wherein the step of allowing further comprises notifying a memory 2 garbage collector associated to the task scheduler.

- 1 7. A task scheduler within a computer system comprising:
 - 2 - at least one task queue capable of managing a plurality of tasks;
 - 3 - a prioritizing module capable of:
 - 4 - actively prioritizing a task within the plurality of tasks to the top of its corresponding task queue, wherein the task has been identified as a cancelled task; and
 - 7 - a memory garbage collector capable of:
 - 8 - freeing resources assigned to the identified task when the identified task reaches the top of any of the at least one task queue.
- 1 8. The task scheduler of claim 7, wherein the prioritizing module is further capable of setting a NextExecution parameter of the identified task to a value near zero.
- 1 9. The task scheduler of claim 7, wherein the prioritizing module is further capable of updating an Index parameter associated with the identified task in accordance with the top of its corresponding task queue.
- 1 10. The task scheduler of claim 7, wherein the prioritizing module is further capable of notifying the memory garbage collector.